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Application No. 10/014,453
Docket No. 740145-218REMARKS

By the above actions, claim 1 has been amended. In view of the actions taken and the following remarks, reconsideration of this application is now requested.

Claims 1 and 2 have been rejected as being anticipated by the admitted prior art. However, as noted in the specification, in the admitted prior art, "the controller 6 sends the signal S2 to the inverter circuit 3, the inverter circuit 3 starts a drive, this signal S2 acting as the trigger. Then, based on an oscillator located in the inverter circuit, switching is performed, by which the lamp is subjected to pulsed luminous operation with a given interval." Thus, in the admitted prior art, the controller merely sends a starting signal to the inverter circuit and the pulsed signal is then produced by the oscillator of the inverter circuit. This has the disadvantages described in the Background portion of the present application relating to the fact that there is a separate oscillator in the image reader in addition to the oscillator of the lighting part.

In direct contrast, as set forth in paragraphs [0030] and [0032] on page 7 of the present application:

The image reader of the invention has the feature that the controller sends to the lighting part not only an emission start signal which synchronizes the switching of the image received by the sensor, as in a conventional image reader, but that the controller sends to the lighting part, a signal which commands pulse emission of the fluorescent lamp in itself.

* * * *

Furthermore, the measure that the oscillator present in the image reader and the oscillator present in the lighting part are located not separately for lamp emission, but in one piece advantageously eliminates the above described disadvantage of the deviation of the timing. If it is assumed in this case that the oscillator of the controller which is present in the image reader has a malfunction for some reason, the sensor and lamp emission are driven directly by the oscillation signal of this common oscillator. The disadvantage of the deviation of the timing of the two from one another is thus eliminated. This point is described in more detail below.

Thus, in accordance with the present invention, the controller itself sets the pulsation of the lamp emission instead of giving only the starting time for emission. As a result, the timing of both the resetting of the CCD detector and the flashing of the lamp depend on only one oscillator which is located in the controller unit, not in the inverter circuit. Accordingly,

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asynchronous driving of the detector and the lamp due to dependency on two different oscillators can be prevented. In this regard, the Examiner's attention is directed to paragraphs [0062] and [0063] on page 12 of applicants' specification which describe this feature and the advantage thereof.

Claim 1 has been amended to more clearly bring out this distinction between the present invention and the admitted prior art. As now defined, it is submitted that the invention is neither rendered obvious nor anticipated by anything in the admitted prior art. As a result, the rejection based upon the admitted prior art should be withdrawn and such action is hereby requested.

Claims 1 and 2 were also rejected as being anticipated by the Sato patent. However, like the admitted prior art, in Sato a pulsed signal for producing pulsed lamp emission is produced within the inverter circuit, not by the controller and sent to the inverter circuit. That is, resetting of the image sensor is driven by a periodic signal SYNC1 and based upon this signal, a delayed signal SYNC2 is generated for timing of lamp emission. Both of these signals SYNC1 and SYNC2 merely set the starting time for resetting of the sensor and starting of light emission, respectively, with the emission period being set by a pulse-width modulation signal PWM. During the emission period, an inverter circuit supplies an AC current to the lamp which has a much higher frequency than the PWM signal (column 9, lines 26-29) and the pulsed (AC current) signal is thus provided by the inverter circuit and not by the controller. Accordingly, the distinctions noted above between the present invention as defined by amended claim 1 and the admitted prior art also exist with respect to the Sato patent. Thus, the rejection based on the Sato patent also should be withdrawn.

While this application should now be in condition for allowance, in the event that any issues should remain after consideration of this response which could be addressed through discussions with the undersigned, then the Examiner is requested to contact the undersigned by telephone for that purpose. In this regard, the Examiner's attention is directed to the new correspondence address and telephone number indicated below and on the accompanying Change of Address notice.

Lastly, accompanying this response is a request for an extension of time and authorization to charge the associated fees to the deposit account of the undersigned's firm. However, should this extension become separated from this response, then this response

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should be construed as containing such a request and the associated fees should be charged to Deposit Account No. 50-2478(740145-218).

Respectfully submitted,

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